

The Solutions Network

Rochester, New York

Red Obstruction Lights

Howard Kernodle
National Energy Program Manager
Federal Aviation Administration
Air Traffic Organization





LED v. Incandescent

LED Steady State

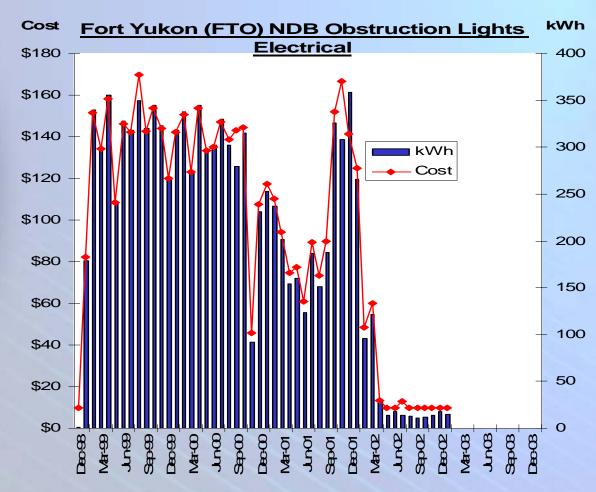
- 12.5 watts/light
- Annual Energy Consumption:
 60.125kWh of energy
- First year total cost: \$212.51
 - o Operating cost \$6.01
 - Bulb cost \$195.00
 - o Installation cost \$11.50
- Each year 2 –10 cost: \$6.01
- 10-Year Cost: \$266.66

Incandescent Steady State

- 116 watts/light
- Annual Energy Consumption:
 - o 557.96kWh of energy
- First year total cost: \$158.30
 - o Operating cost \$55.80
 - o Bulb cost \$100.00
 - o Installation cost \$2.50
- Each year 2-10 cost: \$158.30
- 10-Year cost: \$1,583



FTO NDB in Fort Yukon





Red Obstruction Lights

- 20,000 obstruction lights in the NAS
- 3000 LED installed
- AAF-1 direction: Buy only LEDs
- LED lights are rugged and efficient
- 90 percent less energy
- 10 times longer life
- Reduced maintenance burden
- Full implementation will save \$7,500 daily,
 \$2.5M annually in energy costs
- Log Center "buy" of 9,000 for "free issue"



Persevere

- "Sell" benefits
- Establish a "formal" requirement
- Secure funding
- Secure funding
- "Commercialize" adoption
- Work the loose ends